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RUSSIAN SCIENTIFIC LITERATURE:

A Guide to Sources, Translations, and Translators

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Armed Forces-NRC Committee on Bio-Astronautics

Division of Medical Sciences

NATIONAL ACADEMY OF SCIENCES-NATIONAL RESEARCH COUNCIL

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RUSSIAN SCIENTIFIC LITERATURE  
A Guide to Sources, Translations, and Translators

This material has been compiled to furnish members of the Armed Forces-NRC Committee on Bio-Astronautics with an abbreviated guide to Russian scientific literature in general. No attempt has been made to list references in specific scientific areas. Also no attempt has been made to make reference to the specialized translation services within many governmental organizations, inasmuch as these units operate primarily for the use of, and are familiar to, the members of their organization. The Secretariat of the Bio-Astronautics Committee will be pleased to assist Committee members with translation problems upon request.



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## I. U. S. Governmental Translation Listings

### A. Technical Translations

An enormous number of Soviet scientific papers are translated by, and for, numerous Government and private agencies. Copies of most of these publications are made available either through translation depositories or by commercial translating agencies. At present there are two main translation depositories in the United States:

1. The Special Libraries Association Translation Center located at the John Crerar Library in Chicago
2. The Office of Technical Services, Technical Information Division in the Department of Commerce, Washington 25, D. C.

The SLA Translation Center collects translations from non-Governmental sources, such as universities, professional societies, and industry, which contribute their translations to the Center for dissemination to the public. The OTS Technical Information Division collects translations from Government agencies and foreign sources, such as Great Britain, Canada, Australia, and others. Both depositories exchange copies of translations. All translations are listed, with abstracts of the articles translated in Technical Translations, published twice monthly since January 1959 by the OTS as a sequel to the previous SLA Translation Center Publication, Translation Monthly. Translations prepared by commercial translating agencies are also listed in Technical Translations. Copies of Technical Translations are available individually or on subscription from the Office of Technical Services, U. S. Department of Commerce, Washington 25, D. C., at 60¢ a copy or \$12 per year.

To make this material available at a lower cost, many Government agencies are contributing twenty-five copies of each item translated. These items are sold by OTS and are available for review at the following OTS Depositories:

Carnegie Library of Pittsburgh  
Georgia Institute of Technology, Atlanta, Georgia  
Massachusetts Institute of Technology, Cambridge, Massachusetts  
Pennsylvania State University, University Park, Pennsylvania  
Special Libraries Association Translation Center, The John  
Crerar Library, Chicago  
University of California, Engineering Library, Los Angeles

The following listed Department of Commerce Field Offices can also furnish information regarding Technical Translations and other translation services offered by the Office of Technical Services:

Albuquerque, New Mexico, Post Office Building  
Atlanta 3, Georgia, 66 Luckie Street, NW  
Boston 9, Massachusetts, Post Office and Courthouse



Buffalo 3, New York, 117 Ellicott Street  
Charleston 4, South Carolina, Sergeant Jasper Bldg.  
West End Broad Street  
Cheyenne, Wyoming, 207 Majestic Building  
Chicago 6, Illinois, 226 West Jackson Blvd.  
Cincinnati 2, Ohio, 915 Fifth Third Bank Bldg.  
Cleveland 1, Ohio, 4th Floor, Federal Reserve Bank  
Bldg.  
Dallas 1, Texas, Room 3-104, Merchandise Mart  
Denver 2, Colorado, New Custom House  
Detroit 26, Michigan, Federal Building  
Greensboro, North Carolina, Post Office Bldg.  
Houston 2, Texas, 610 Scanlon Building  
Jacksonville 1, Florida, Federal Building  
Kansas City 6, Missouri, 911 Walnut Street  
Los Angeles 15, California, 1031 S. Broadway  
Memphis 3, Tenn., 22 North Front Street  
Miami 32, Florida, 300 NE First Avenue  
Minneapolis 1, Minnesota, Metropolitan Bldg.  
New Orleans 12, Louisiana, 333 St. Charles Ave.  
New York 1, New York, Empire State Bldg.  
Philadelphia 7, Pennsylvania, 1015 Chestnut St.  
Phoenix, Arizona, 137 N. Second Avenue  
Pittsburgh 22, Pennsylvania, 107 Sixth St.  
Portland 4, Oregon, Old U. S. Courthouse  
Reno, Nevada, 1479 Wells Avenue  
Richmond 19, Virginia, 309 Parcel Post Bldg.  
St. Louis 1, Missouri, New Federal Bldg.  
Salt Lake City 1, Utah, 222 S.W. Temple St.  
San Francisco 11, California, 555 Battery St.  
Savannah, Georgia, U. S. Courthouse and Post  
Office Bldg.  
Seattle 4, Washington, Federal Office Bldg.

B. Scientific Information Report

This publication is a twice-monthly review by the Central Intelligence Agency of scientific and technical advances in the USSR, Eastern Europe, and Red China in chemistry, earth sciences, electronics, engineering, mathematics, medicine, metallurgy, physics, and other areas. It represents unevaluated information extracted from recently received publications from the above-mentioned areas and the information selected is intended to indicate current scientific developments and activities in these countries. Listings are grouped according to subject area and the great majority of material extracted is from Russian sources. This publication is available from the Office of Technical Services, U. S. Department of Commerce, Washington 25, D. C. for \$2.75 the single issue and \$28 a year.

C. English Abstracts of Russian Technical Journals Available from the Office of Technical Services

Abstracts of pertinent articles appearing in each issue of approximately



50 Russian technical journals are available from the Office of Technical Services, U. S. Department of Commerce. Abstracts are printed on 5" x 8" abstract card forms on card stock, two cards to a sheet, and bound as individual issues. These are available from OTS, U. S. Department of Commerce, Washington 25, D.C.

#### D. Monthly Catalog of United States Government Publications

This catalog includes translations published by the Joint Publications Research Service. It will be noted that this is a more complete listing of translations by JPRS than those listed in Technical Translations, published by the Office of Technical Services, U. S. Department of Commerce. Technical Translations lists only translations of scientific and technical material, while the Monthly Catalog lists, in addition, those in other fields such as economics, social sciences, and politics.

#### E. Quarterly Russian Supplement to ARS Journal

Beginning with the October 1959 issue of the American Rocket Society Journal, a quarterly supplement of approximately fifty pages of translated Russian scientific literature in the field of astronautics has been added. Following is an extract from "Soviet Technical Literature in Translation," from the October issue of ARS Journal which describes this service:

"The October ARS Journal brings to its readers a service designed to answer the question: What does USSR journal literature offer in astronautics?

"This issue of the Journal introduces selected and reviewed Russian journal articles on astronautics translated by Dr. J. George Adashko of the ARS staff. These translated Russian papers will appear quarterly in the Journal through the auspices of ARS and the National Science Foundation, which by a grant supports the program. Presentation of ARS Russian translations in a separate part of the Journal represents an attempt to keep burgeoning technical literature centralized, recognizable, and easily accessible."

#### F. Consolidated Translation Survey

Consolidated Translation Survey is prepared monthly by the Foreign Documents Division, Central Intelligence Agency, 2430 E Street, NW, Washington 25, D. C. from lists received through cooperation of United States Government agencies and includes translations of such agencies, private industry, universities, research institutions and commercial translation organizations. It is a compilation of foreign documentary projects, completed or started during the month preceding publication.

Translations are listed by area and subject category. Scientific projects are grouped as a section regardless of geographic area. Titles in English, author, foreign language title of source of material, date and data of publication, and publication identification of the completed project are given when available. Some of these details are unavailable on projects listed



"in process." New projects in process are listed only once, their subsequent listing being made when they are reported completed.

The Consolidated Translation Survey is available to government agencies and departments, and through them to their authorized contractors and consultants.

#### G. Atomic Energy Commission Translation Lists

The Technical Information Service Extension of the United States Atomic Energy Commission, P. O. Box 62, Oak Ridge, Tennessee, publishes periodic translation lists of foreign scientific material primarily in the fields related to nuclear energy and radiation reported as being translated or in the process of being translated. Organizations will be placed on the mailing list for this information by application to the Technical Information Service Extension.

Translations sponsored by the U. S. Atomic Energy Commission, and others received from various sources, are abstracted in Nuclear Science Abstracts (NSA) if they fall within the subject scope of nuclear science and technology. This journal is published twice a month and is available on subscription from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C. Although the translations are not grouped separately in the body of NSA, a clue to the specific translations and their number can be obtained by using the Report Number Indexes of NSA and the publication, Public Availability of Reports Abstracted in Nuclear Science Abstracts, TID-4000 (5th Ed.). The majority of AEC translations are identified by "AEC-tr" numbers, and many non-AEC translations are identified by "NP-tr" numbers. In addition, other translations, both AEC and non-AEC are identifiable by a suffix "TR" or "Trans" used with the primary code designation, e.g., UCRL-Trans-109 (a translation prepared by the University of California Radiation Laboratory, and AEC contractor)."

#### H. Slavic Science Source File

The Science and Technology Division of the Library of Congress, recognizing its national responsibility to the scientific community, has established a Slavic Science Unit (as well as an Oriental Science Unit) within its Reference Section to provide information on scientific activities in these areas and to collect such pertinent information. A staff of scientifically trained personnel with language competence is maintained for this purpose.

One of the projects within this program is the maintenance of a "Slavic Science Source File," made possible with National Science Foundation support. This file contains annotated references, arranged by subject, to publications from the World's literature describing the "state of the art" of Soviet science and technology. Most of the references relate to accounts of Soviet developments in specific disciplines published in the periodical literature and based on visits of scientists, educators, engineers and members of other professional groups to the U.S.S.R. Most of the approximately 15,000 scientific and technical journals of all nations received at the Library of Congress are searched regularly for papers dealing with such descriptions. Also included are references to bibliographies, dictionaries, special glossaries, abstracting services and cover-to cover English translations of Soviet journals. A total of some 3000 references have been collected to-date.



Publication of the complete file is not contemplated at this time. However, annotated bibliographies dealing with individual subjects will be issued whenever warranted.

The Division invites and welcomes receipt of unclassified evaluation reports prepared either as a result of visits to the Soviet Union or from analytical studies. The file is available for consultation to anyone interested and reference inquiries by mail or personal visits to the Science and Technology Division are welcomed.

## II. British Sources

In Britain the Department of Scientific and Industrial Research, Lending Library Unit, publishes LLU Translations Bulletin, a monthly publication which lists recent Russian accessions of the LLU. It is available on annual subscription from Her Majesty's Stationery Office, P. O. Box 569, London S. E., 1, England. Other publications listing LLU holdings of Russian literature are: Titles of Current Periodicals from the USSR and Cover-to-cover Translations: List of Books Received from the USSR (issued periodically; back numbers available) and A List of Irregular Serials Received from the USSR. Copies of these publications may be obtained upon request to D.S.I.R. Lending Library Unit, 20 Chester Terrace, London, N.W. 1, England.

## III. United States Joint Publications Research Service

The United States Joint Publications Research Service (JPRS) is an office of the Federal Government established to provide a centralized, unclassified translation service for those U. S. Government departments having an interest in and a need for the processing of foreign documentary materials, and to prevent where possible duplication in this work. The majority of its work is coordinated through the Office of Technical Services, Department of Commerce for whom JPRS acts in the capacity of field manager for translation activities. However, any component of the Federal Government may utilize JPRS services through the intra-government purchase order system.

JPRS accepts work orders only from government components, and contracts only with individual linguists for translations. All subjects and languages are handled subject only to availability of contractor capabilities. Purchase order work prices range from \$14 per thousand English words for material in Western languages to \$16 per thousand English words for material in Oriental languages. These rates cover translation, editing, and typing. Hand entrees of charts, equations, diagrams, and symbols, photo-offset work, or provision of multiple copies may result in additional charges in order to cover costs incurred. Original language documents or material must be supplied by requestors. Billing for purchase order work is made on SF1080, and payment is accomplished on a transfer of funds basis.

The main office of JPRS is located at Suite 300, 205 East 42nd Street, New York, N.Y. The District of Columbia office is located on the 2nd and 3rd floors, 1636 Connecticut Ave., NW, Washington 9, D. C. During 1960 a third office will be opened on the West Coast.



JPRS itself has no facilities for the dissemination of its reports, acting only as a clearing house and an expeditor for translations. Standard distribution of routine work program reports is accomplished through the Office of Technical Services, U. S. Department of Commerce. Purchase order translations are delivered only to the requestor.

Routine work program reports are made available to the general public through two outlets. Political, economic, and sociological reports are sold in photo-copy form by the Photoduplication Service, Library of Congress, Washington 25, D. C. Scientific and technical reports are sold by the Office of Technical Services, U. S. Department of Commerce, Washington 25, D. C.

Current listings of all JPRS reports are included in Technical Translations, published by the Office of Technical Services, U. S. Department of Commerce, and in the Monthly Catalog of United States Government Publications issued by the Superintendent of Documents, U. S. Government Printing Office. To avoid duplication, projects in process are listed in the Consolidated Translation Survey, published monthly by the Central Intelligence Agency.

#### IV. Commercial Translators

A listing of 154 commercial organizations throughout the United States offering translation services is contained in Translators and Translations: Services and Sources, edited by Frances E. Kaiser and a project of the Special Libraries Association.

#### V. Sources of Soviet Scientific Publications

Much of the Soviet scientific periodical literature available in the United States today in the English language is in the form of cover-to-cover translations of Russian journals with most of the translated editions matching the original issue-for-issue. Providing U. S. Scientists with Soviet Scientific Information, prepared by the Office of Science Information Service, National Science Foundation, provides a listing of Russian scientific journals available in English, with additional information as to date translation began, frequency of publication, agency publishing the translation, sponsor, and subscription price. This listing includes 76 journals.

With the increasing of freedom of flow of Soviet materials since about 1956, acquiring standard Soviet publications no longer poses a serious problem. A number of bibliographies are issued in the Soviet Union which are readily available to the United States. Some of the major ones are listed below (from Providing U. S. Scientists with Soviet Scientific Information):

##### Novye Knigi (New Books)

This weekly publication announces books to be published. It includes a brief description of each book. Each issue usually contains 100 or more pre-publication notices.

Additional pre-publication notices are announced in catalogues devoted to special subjects. A typical



example is Sovetskie Knigi Po Metallurgii (Soviet Books on Metallurgy) No. 2, 1959. Each issue usually contains 130 or more pre-publication notices.

Knizhnaia Letopis' (Book Chronicle)

This weekly publication announces books after they have been published. Each issue contains approximately 1,300 publication notices.

Letopis' Zhurnal' Nykh Statei (Chronicle of Periodical Articles)

This weekly publication indexes articles from Soviet periodicals. It includes scientific and technical literature. Each issue indexes approximately 2,200 articles.

Letopis' Gazetnykh Statei (Chronicle of Newspaper Articles)

This weekly publication indexes articles from Soviet newspapers. It includes articles of scientific and technical interest. Each issue indexes approximately 700 articles.

Soviet Scientific Journals, printed in English and French by Mezhdunarodnaya Kniga (International Book), USSR, Moscow, 200, contains a list of 96 Soviet scientific journals with a brief description of each, subscription price, and instructions for placing subscriptions.

Mezhdunarodnaya Kniga (International Book) lists six United States Sources as being approved agencies to accept subscriptions to Russian scientific literature. All six of these agencies have been contacted by the Secretariat and found to be most cooperative. They are:

Imported Publications & Products  
4 West 16th Street  
New York 11, New York

Four Continent Book Corporation  
822 Broadway  
New York 3, New York

Moore -- Cottrell, Subscription Agencies, Inc.  
North Cohocton, New York

Universal Distributors Company  
52 - 54 West 13th Street  
New York 11, New York



Stecher-Hafner, Inc.  
31 East 10th Street  
New York 3, New York

Victor Kamkin, Inc.  
Book Store  
2906 14th Street, NW  
Washington 9, D. C.

Many, although not all, Soviet publications of individual institutes are available on exchange. The Processing Department of the Library of Congress maintains a list of Soviet institutions with which the Library of Congress has established exchange relations.

Some of the Soviet institutional publications, especially those with limited circulation, are available on exchange only. This material is usually limited to a narrow subject field, and is exchangeable for equivalent publications in the same subject field. Information about these is practically non-existent, or available only long after the supply is exhausted. In cases like this, however, scientists corresponding with their counterparts in the USSR, have been able to learn of the forthcoming publications in time to forewarn the libraries of their institutions to effect an exchange.

The availability of Soviet scientific publications in United States Libraries varies. The nature and extent of U. S. Library holdings in this area is greatly dependent on the particular interests of the respective institutions in Soviet affairs in general or in fields of scientific research where Soviet contributions have been notable as well as on the number and subject fields of scientists present who are able to read Russian. It has been noted, however, that institutions with considerable interest in Soviet political affairs, social sciences or humanities do not necessarily have holdings in the natural sciences.

While no accurate data on U. S. Library holdings in science are available, the Monthly Index of Russian Accessions contains a listing of U. S. Libraries which currently receive publications from the USSR. A report, Russian and East European Publications in American Libraries, prepared by Melville J. Ruggles and Vaclav Mastecky for the Committee on Slavic and East European Studies of the Association of Research Libraries, also includes some information on scientific literature.

The Monthly Index of Russian Accessions is a record of the publications in the Russian language issued in and outside the Soviet Union that are currently received by the Library of Congress and a group of cooperating libraries. Whenever possible, publications printed in other languages spoken in the Soviet Union are also included. However, publications in the languages of the USSR issued in countries of Eastern Europe are not included, since they are covered by the East European Accessions Index.

The Monthly Index consists of three parts. Part A lists monographic literature, Part B lists Russian periodicals with their tables of contents translated into English, and Part C is a subject guide to both the monographs and periodical articles lists in Parts A and B.



Cumulative author, subject, and periodical location indexes to the first four volumes of the Monthly Index are available as separate publications. Beginning with Volume 5, an author index to the monographs, and a periodical location index for the entire volume are furnished as appendices to the first two issues of the following volume.

Orders for microfilm or photostat copies of the listed items that are in the collections of the Library of Congress may be placed with the Photoduplication Service, Library of Congress, Washington 25, D. C.

The Monthly Index of Russian Accessions is for sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. Price of single copies varies, subscriptions price, \$12 a year. Price of Cumulative Index to Volumes 1-3, \$1.50, to Volume 4, \$0.60.

#### VI. Selected References

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716-20 (1957)

Beyerly, Elizabeth. A Russian abstracting service in the field of sciences:

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Beyerly, Elizabeth. Translations from the Russian; a guide to sources.

Rev. Doc. 23:33-41 (1956)

Central Intelligence Agency, Foreign Documents Division, Consolidated Intelligence Survey, Washington (distributed monthly by Foreign Documents Division, Central Intelligence Agency, 2430 E Street, NW, Washington 25, D. C.)

Gorokhoff, B. I. Publishing in the U.S.S.R. Slavic and East European Series Vol. XIX, Bloomington, Indiana, Indiana University Publications, 1959 (Available from the Indiana University Research Center in Anthropology, Folklore, and Linguistics, Bloomington, Indiana)

Hoffman, Bernard G. Social Science Literature Published in "Difficult" Languages, and Problems Related to Its Use by American Social Scientists, Foreign Science Information Program, Office of Science Information Service, National Science Foundation, 1959.

Hoseh, M. Scientific and technical literature of the USSR. J. Chem. Ed. 33:397-402 (1956); 34:182-5 (1957); 34:235-8 (1957)

Kaiser, F. E. Translators and Translations: Services and Sources. New York, Special Libraries Association, 1959.

Krieger, F. J., Keeping Up to Date on Soviet Astronautics, Astronautics 4: 30-32 (April 1959)



Library of Congress, Monthly Index of Russian Accessions, Washington (Available from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. \$12 a year)

Library of Congress. Science Division. Scientific and technical serial publications; Soviet Union, 1945-53. Washington, Government Printing Office, 1954 118 p. 60 cents

Liepina R. G. Soviet abstracting services and procedures. Washington, National Science Foundation, 1958. 10 p. (Mimeo)

Mackay, A. L. Sources of Russian scientific information. ASLIB proc. 6:101-10 1954

Mezhdunarodnaya Kniga (International Book) Magazines of the Academy of Sciences of the USSR, Moscow, 200, USSR (Available from Imported Publications and Products, 4 West 16th Street, New York 11, N Y )

Mezhdunarodnaya Kniga (International Book) Newspapers and Magazines of the USSR, 1960 Moscow, 200 USSR, (Available from Victor Kamkin, Inc. Bookstore, 2906 14th Street, NW, Washington 9, D C)

Mezhdunarodnaya Kniga (International Book) Soviet Scientific Journals, Moscow, 200 USSR (Available from Imported Publications and Products, 4 West 16th Street, New York 11, N Y )

National Library of Medicine, U S Department of Health, Education, and Welfare, Guide to Russian Medical Literature, USPHS Publication No. 602, Washington, 1958 (Available from Superintendent of Documents U S Government Printing Office, Price 40 cents)

National Library of Medicine, U S Department of Health, Education and Welfare, Scientific Translations, A Guide to Sources and Services, USPHS Publication No. 514 (rev), Washington, 1959 (Available from Superintendent of Documents, U S Government Printing Office, 15 ¢)

National Science Foundation, Office of Science Information Service, List of Russian Scientific Journals Available in English, Washington, October 1959. (Available from National Science Foundation, Washington 25, D. C.)

National Science Foundation, Office of Science Information Service, Providing U S Scientists with Soviet Scientific Information, Washington, May 1959. Available from National Science Foundation, Washington 25, D. C.)

Newbauer, John A., Soviet Technical Literature in Translation, ARS Journal 29: 730-33 (October 1959) (Reprints available)

O'Dette, R. E. Russian translations. Science 25:579-85 (29 March 1957)

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